ASSESSING THE QUALITY OF SCENARIOS IN SCENARIO PLANNING

by

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The scenario planning literature covers a variety of perspectives and views on how scenario planning is and should be conducted. Indeed, numerous books on the topic are particularly aimed at practitioners. One topic of increasing interest is the issue of how to evaluate or assess scenario planning efforts. It has been suggested that scenario planning should result in increased financial performance, but it is difficult to isolate the forces behind any improved financial performance. Other methods for evaluating scenario planning have included examining participant learning and assessing organizational reaction time to particular events. It has even been suggested that effective scenario planning will often be "under the radar," as an organization using this technology would theoretically be able to anticipate any fundamental shifts and make adjustments before problems are introduced.

These efforts at evaluating scenario planning have received mainly cursory consideration in the literature, and the larger problem, of how to show organizational leaders that their investments in scenario planning are worthwhile, is more important than ever. According to the Oxford English Dictionary, the term "evaluate" literally means: "to form an idea of the amount, number, or value of." One alternate strategy is to begin by finding a way to assess the quality of any given set of scenarios with an aim of increasing the likelihood the scenarios will be engaging, effective, and useful for managers and executives. To "assess" means: "to estimate the nature, ability or quality of." The scenarios will be engaging, effective, and useful for managers and planners to suggest that high quality scenarios are the starting point for looking at other forms of results, be they financial, learning-based, or other.

The scenario literature features three fundamental criteria for scenarios that are likely to engage managers who use them. Scenar-

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ios must be relevant, challenging, and plausible in order to elicit buyin and function as useful tools for managers. It is generally agreed upon that these criteria came out of the scenario experiments at Royal Dutch/Shell and the scenario planning pioneers who spent time there. These three criteria are mentioned repeatedly but not discussed in depth in the literature.

THE PROBLEM

The problem is that a comprehensive approach to evaluating scenario planning does not exist. This article will consider what makes a given set of scenarios useful, in order to develop clear criteria for assessing the quality of scenarios.

PURPOSE OF THE ARTICLE

The purpose of this short article is to propose and clarify six criteria (in addition to the existing three above) and discuss how these criteria can be combined and used to develop a set of scenarios with a high likelihood of provoking new strategic insights. More specifically, this article will offer a practical tool to be used for assessing the quality of scenarios before rolling them out among managers, executive teams, and organizations.

SCENARIO PLANNING: AN OVERVIEW

There are two overarching categories of scenario planning: 1) qualitatively-driven scenario planning and 2) quantitatively-driven scenario planning, within which numerous variations exist. Generally speaking, qualitatively-driven scenario planning is based on external environmental analysis, internal organizational interviews, group process work, imagination, intuitive investigation of trends, and substantive analysis of data. The analytic and creative thinking of the people involved in the process is the driving force in determining the resulting scenarios. Quantitatively-driven scenario planning is often the result of computer analysis, involving probability estimates that a given scenario will occur, and various other numeric representations that shed light on a variety of possible future events. The focus of this article is on scenarios developed from a qualitatively-driven approach—i.e., the form of scenario planning devel-

oped by Pierre Wack and Ted Newland in the 1970s at Royal Dutch/Shell (the intuitive logics approach).

Stated simply, a set of scenarios is a set of varying paths into the future that challenge the conventional thinking inside the organization. According to de Geus, the scenarios provide a forum for organizational decision-makers to "play" with various decisions and their implications in an imagined environment. The qualitative approach to developing and using scenarios is intended to provoke insights through conversation and dialogue about the difficult issues facing the organization, and the often-opposing viewpoints on the issues that exist within the organization. It is through dialogue, argumentation, and a genuine willingness to consider alternate perspectives that strategic learning occurs and a shared sense of the organization and its environment can be established.

PINK'S SIX SENSES

Daniel Pink's recent book *A Whole New Mind* (2006) picks up where Thomas Friedman's *The World is Flat* (2005) left off. Pink and Friedman both suggested that, just as manual labor was outsourced from the US and the UK to overseas locations based on a lower cost of labor, so are "white collar" organizational functions, going to be. As China and India produce increasing numbers of MBAs, engineers, and software development specialists, the rate at which additional financial analysis, computer programming and software engineering functions will also be outsourced to these less expensive labor pools will increase. Continued outsourcing from the US and the UK has implications for the workforces in both nations.

Pink's contribution is that global development has thus far been a result of left-brain, analytical thinking. Highly developed countries have focused their efforts on analysis—from the way McKinsey consultants approach strategy, to the way lawyers prepare for trials. The fundamental tool on which a previous generation of parents based their career advice was the ability to apply logic to any given situation in a systematic manner. Pink suggested that left-brain, analytical activity is still required, but by itself is no longer enough. In the coming decades, highly valued work will be based on analysis, but it must also offer synthesis. This kind of work will integrate innovation and creativity, with data, use story techniques, and provide a framework in which people can co-create meaning. It seems clear that scenario work draws on both the analytical and creative skill sets, and Pink described six "senses" that would drive highly valued work well into the coming decades. These were: 1) design, 2) story, 3) symphony, 4) empathy, 5) play and 6) meaning. It is important to note that Pink's work is clearly written for relevance in highly developed countries.

Design

Pink noted that developed countries are experiencing an age of material abundance. This means that consumers in these countries are not limited in their choices, and now, more than ever, are able to choose material goods based on their preferences. Pink used Princeton University architecture professor Michael Graves as an example. Michael Graves has designed an entire line of home furnishings available at Target stores. A toilet brush is one of these items, and while every toilet brush serves essentially the same purpose, the one designed by Michael Graves outsells all others.

Cars are another example. It is no longer enough that cars drive—they must be comfortable, quiet, fast, reliable, have allweather traction, and be iPod compatible. In short, design is a skill, and a skill that has not come to the forefront of business, except in certain industries, until recent years. As the number of product choices available in developed countries continues to increase, so too will the demand for products that are aesthetically pleasing.

Story

People can remember information more easily if it is presented in the form of a story. From the studies at Xerox and 3M, it is clear that organizations are harnessing the tendency of the human brain to think in story format.

Most primitive, pre-industrial cultures featured stories as a means for transferring history and critical knowledge. Native American tribes and South African Ubuntu tribes are but two examples. From script-writers in Hollywood to descriptions of homes for sale in real estate ads and on wine bottles, story elements are now being used to do what they do best—i.e., influence and strike an emotional chord. Research at Columbia University Medical School on "narrative medicine movement" suggests that the ability to understand patient stories plays an important role in diagnosis, treatment and healing (Charon, 2001).

Symphony

According to Pink, symphony is simply an updated word for systems thinking. "Symphony, is the ability to put together the pieces." Further, "People who hope to thrive in the conceptual age must understand the connections between diverse, and seemingly separate, disciplines" (Pink, 2006). To illustrate how symphonic thinking will be important in the conceptual age, Pink felt that, as more computer jobs are sent to India, there will be an increasing demand for "people who can manage the relationships between the coders in the East and the clients in the West. These whole-minded professionals must be literate in two cultures, comfortable in the hard science of computing and the soft science of sales and marketing."

Empathy

"Empathy is the ability to imagine yourself in someone else's position and to intuit what that person is feeling. It is the ability to stand in each other's shoes, to see with their eyes, and to feel with their hearts" (Pink, 2006). Essentially, work that can be automated or outsourced will be, and the high-value work, according to Pink, will be the work that is unique, heartfelt, and based in communicating things that are difficult to simply describe with a removed sense of logic. Consider a doctor who can read an X-ray and communicate the results to a patient. The reading of an X-ray can be done in Bangalore, but "it's hard to deliver empathy—touch, presence, and comfort—via fiber-optic cable" (Pink, 2006). Given the aging populations in highly developed countries, it is likely that the demand for highly trained healthcare professionals will continue and, because this work is increasingly based in empathy, it is unlikely to be outsourced.

Play

Play is cited as an increasingly fundamental part of important work in all kinds of organizations. Consider the current popularity of video games—"In the United States, the video game business is larger than the motion picture industry" (Pink, 2006). This statistic indicates a growing trend in developed countries for people to be able to draw on imagination and experience things in alternative environments separate from their everyday lives. But play refers to so much more than games. A playful attitude is often an indicator of a creative personality (Csikszentmihalyi, 1996). The role of a playful attitude has been suggested as a business skill, leading to high emotional intelligence. In short, Pink argued that the ability to incorporate play into work is a critical skill that has many favorable sideeffects in the coming conceptual age.

Meaning

Related to the fact that, in developed countries, abundance is prevalent, people in those countries are searching for more satisfying, meaningful lives (Pink, 2006). Pink cited dissatisfaction with current global politics (Koenig, 2001), research in current corporate environments in which spirituality is growing (Karlgaard, 2004), and the rising popularity of activities such as yoga and meditation (www.bikramyoga.com) as evidence that now, more than ever, people seek meaningful, fulfilling occupations and lives. While this tendency is contributing to some generation gaps (consider the difference between generations that survived the Great Depression in which it was a privilege to be employed at all, and today's generation of iPod-wearing, would-be yogis with geographic preferences), it is undeniable that the current generation in developed countries is choosing its future (Florida, 2005).

SUMMARY

These six senses "are fundamentally human attributes" (Pink, 2006) and are posited as the foundation for succeeding in the conceptual age. In developed countries, these senses form the foundation of a logical skill set as the complexity of issues and problems in organizations exceeds the repertoire of a strictly analytical approach. At first glance, a key limitation to these skills is that they are simply less relevant in developing countries with little-to-no infrastructure and mass suffering due to famine, disease and the need to meet basic survival needs.

Pink's six senses immediately connect to the purposes, formats, and mechanisms of scenario planning. The remainder of this article will provide the logical arguments that link Pink's work to scenario planning, suggest how these senses can be used as criteria for assessing the quality of scenarios, and provide a scenario quality checklist that can be used for that very purpose.

USING THESE "SENSES" AS CRITERIA FOR ASSESSING SCENARIOS

Pink's six senses intuitively make sense in the context of the knowledge worker. By definition, "scenarists" are knowledge workers, and the skills outlined by Pink would make for the intriguing beginnings of a competency model for scenario workers. However, these six senses can serve a more particular purpose. The following sections describe each of Pink's six senses as a criterion for evaluating the usefulness of scenarios in scenario planning.

Wack (1985) stated: "The most important purpose of the scenario building process is to shift the thinking of the leadership inside the organization about what might happen, in the future, in the external environment." Useful scenarios, therefore, must force leaders to see familiar situations in an unfamiliar way.

Design as a Criterion

The design of a set of scenarios is critical. Scenarios must incorporate themes such as songs by the Beatles (Ogilvy and Schwartz, 1998), catchy phrases that are easy to recall (Ringland, 1998), and colorful images to make the set of scenarios aesthetically pleasing (Kahane, 1992). People need to want to read the scenarios, and the document itself is often the first contact some will have with the ideas that it carries.

Story as a Criterion

Obviously, scenarios tell stories. Stories are perhaps the foundation of scenarios and scenario planning. Each scenario should contain an interesting plot that captures reader attention, and contain tension that is ultimately resolved. The story criterion is the logical location of the three sub-criteria that have been mentioned in the scenario literature previously: that each scenario be relevant, challenging and plausible.

Scenarios must be relevant in that they capture the elements that managers are concerned about. These elements usually come from the participant interviews. A sure way to make scenarios relevant is to revisit the interviews and make sure that the scenarios contain the issues and problems of concern to managers. The challenging criterion reflects the fact that effective scenarios must provide something new and insightful about the future. The stories must challenge the assumptions of the decision-maker, and reveal the situation in a new way. Plausible stories are possible stories. The stories contained in a set of scenarios cannot be so challenging that they provoke dismissal, and the plausibility criterion is a check against the tendency to get carried away with creativity. The fact that the stories must be plausible also reveals the extensive research that must go into a solid set of scenarios.

Overall, checking to make sure that scenarios are relevant, challenging and plausible to those who will use them is critical in examining the effectiveness of the stories they contain. This can be done with a pilot group, before rolling out scenarios in the organization, or through using people unconnected to the organization.

Symphony as a Criterion

The term symphony evokes the concepts based in systems thinking. Using the symphony criterion means checking that each scenario contains a "system" of interacting events, characters, and interactions. Each scenario must form a logical whole in which the various elements and their relationships can be seen. Using systems diagrams as part of the scenario construction process is one way to enhance the symphony criterion (Ward and Scheifer, 1998).

Empathy as a Criterion

Empathy may embody the crux of scenario planning. That is, empathy is at the center of the ability for individuals to see something with new eyes. By literally imagining a given situation from different perspectives, scenario planning participants cannot help but to empathize with situations and individuals they may not have previously considered, and when they do so, they are really getting the most out of their scenario exercise. Scenario planning facilitators must also be highly able to empathize with managers in order to make the scenarios compelling. This brings to mind the story of Pierre Wack throwing stones at bamboo stalks in Japan. When his aim was such that the stone hit the stalk just slightly to either side, it would glance off. However, when his aim was true, the stone would make a very distinct sound when it hit the center of the stalk. Wack used this story to describe the precision with which effective scenarios must be constructed. The ability to empathize with managers, and incorporate elements of concern from their initial interviews, is one key to making the scenarios more likely to be used, more compelling, and more likely to prompt managers to transform how they view a series of possible events.

Play as a Criterion

The set of scenarios, and each scenario individually, must create a world in which managers can "play." If possible, one strategy is to create physical spaces, or rooms, that feature the qualities of each scenario. By putting decision-makers into this physical space, the natural inclination to play can be enhanced. Mental play is just as important, thus the scenarios should not be so tight as to stifle creative wondering or additional speculative thinking. Awakening the imagination can be a time-consuming process and, while the business world continues to move faster and faster, innovative ideas are often found by slowing down, stepping away, and allowing time to reflect (Csikszentmihalyi, 1998).

Meaning as a Criterion

Scenarios provide a forum for awakening creativity and innovative thinking in the individuals who use them. Case studies from companies that have used scenarios (Ringland, 2002) suggest that scenarios, and the scenario planning process, encourage organization members to take ownership of ideas and processes. In some ways, creating a feeling of ownership signals a sense of increased meaning (Csikszentmihalyi, 1998). More specifically, each individual scenario portrays the future in a fundamentally different way, allowing users to interpret the meaning of a given set of variables or issues, and how they play out in the future in a variety of different ways. Scenarios provide a scaffolding for making meaning out of a complex set of forces and how they interact to form a unique future (Chermack and van der Merwe, 2003).

THE SCENARIO QUALITY ASSESSMENT CHECKLIST

Pushing Pink's six senses up against a set of scenarios provides a framework in which to assess the overall quality of the set of scenarios. The Scenario Quality Assessment Checklist (see Figure 1), in Appendix illustrates the use of these senses as scenario assessment criteria with questions intended to prompt the judgment of the scenario team for each criterion. Since the existing criteria for scenarios (relevant, plausible, and challenging) really refer to the storylines within the scenarios themselves, these criteria can be located within the story sense described by Pink and are therefore subsumed in the checklist.

CONCLUSION

The scenario quality checklist is intended as a pragmatic tool for assessing the quality of scenarios in scenario planning. While a preliminary model, the checklist is promising because Pink's elements are obviously relevant in the context of scenario planning.

In the absence of proven methods for evaluating scenario planning, the scenario quality assessment checklist is a step toward a more comprehensive evaluation methodology. This checklist provides a way of finding potential deficiencies in a set of scenarios, or alternatively, a way of increasing the likelihood that the scenarios will be effective tools for shifting the thinking inside the organization (Wack, 1985).

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APPENDIX

FIGURE 1 - THE SCENARIO QUALITY ASSESSMENT CHECKLIST

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Design				
Are the scenario titles clever and easy to remember? Is the presentation of the scenario workbook attractive and aesthetically pleasing?				
Story				
Is each scenario story <i>relevant</i> , <i>challenging</i> , and <i>plausible</i> to the intended audience? Is the story presented in each scenario compelling and interesting?				
Symphony				
Does each scenario present a consis- tent world in which the various ele- ments relate? Does each scenario describe integrated events that can be presented as a whole?				
Empathy				
Do the scenarios evoke empathy? Are the characters and events in each scenario easy for managers to relate to, and do they draw on real issues?				
Play				
Does each scenario provide the back- ground for managers to experiment with varying ideas? Does each sce- nario lend itself to creativity in an- swering the "what if" questions?				
Meaning				
Does each scenario provide a forum in which a management team can derive and create meaning? Do the scenarios incorporate events that are meaningful?				

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